

MEDC Advanced Battery Manufacturing Strategy

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Mission – “Establish Michigan as the advanced battery manufacturing capital of North America for both the commercial and defense marketplace”

Opportunity – Approximately \$2.0 Billion in Federal competitive dollars targeted toward creation of a Domestic Advanced Battery Manufacturing capability

- Announcement expected within one week
- Multiple awards expected
- Proposals advantaged by OEM participation
- Anticipated short window for response

Why is battery manufacturing important?

- There is currently no large scale US-based vehicle-related lithium-ion battery manufacturing. The bulk of manufacturing resides in Japan, Korea and China. Lithium-ion batteries have many promising attributes that make them the logical choice as the first-mover in Plug-in Hybrid and Battery Electric Vehicles.
- With the electrification of vehicles (consumer, commercial and military) rapidly expanding due to changes in policy, war-time needs, the continued threat of climate change, and consumer attitudes, the country is at risk of trading dependence on foreign oil for foreign batteries.
- The United States Electric Vehicle Battery Market is expected to reach \$19 Billion by 2020. Without a US presence, none of those dollars would accrue here, and domestic auto manufacturers will undoubtedly be placed in a competitive disadvantage, both in terms of cost and availability of batteries.
- Proximity to customers, supplier value chain, and R&D expertise is critical in the successful integration of battery systems into transportation applications. The economic impact of establishing a battery manufacturing facility multiplies over all of those fronts, and reinforces a state's technology leadership position.
- The United States cannot continue to cede its manufacturing leadership to foreign countries and needs to leverage existing talent and infrastructure to boost economic viability – that talent and infrastructure exists in Michigan.

MEDC Goals

- Put incentives/programs in place that would advantage Michigan-based applications in the pursuit of Federal funds expected to flow in the area of advanced battery manufacturing
- Create relationships with Department of Defense, Department of Energy and National Lab system to ensure Michigan's capabilities are understood by key decision-makers

Background

- December 2006 - MEDC identifies Advanced Energy Storage, with initial focus on transportation, as an industry sector focus based on MI competitive advantages (OEM location, Auto Supplier density, RD&D density, Universities)
- Summer 2007 – MEDC identifies from numerous Federal Agencies that advanced battery manufacturing is being identified as a 'Critical National Need' and that significant Federal funds will ultimately be provided to accelerate this new market
- December 2008 – Michigan Legislature passes HB 6611 which includes one refundable tax credit for a cell manufacturing facility
- December 2008 - MEDC creates 'Battery Alliance' including Oak Ridge National Laboratory and TARDEC to jointly support advanced battery projects in support of cell manufacturing effort
- February 2009 – Federal Government announces approximately \$2.0 Billion in competitive grants to accelerate Advanced Battery Manufacturing and Battery RD&D in the US.
- Ongoing – MEDC continues to review potential applicants to both the State and Federal opportunities
- Today – MEDC recommends amendment to last session's HB 6611 to increase cell manufacturing credits from one to three to ensure new battery manufacturing industry develops primarily in MI